# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2008-XXXX

WASTE DISCHARGE REQUIREMENTS
FOR
HOLIDAY HARBOR INCORPORATED
AND
U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE
FOR OPERATION OF HOLIDAY HARBOR MARINA
SHASTA COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board), finds that:

- 1. Waste Discharge Requirements (WDRs) Order No. 93-132, adopted by the Regional Water Board on 6 August 1993, prescribes requirements for discharges of domestic sewage from Holiday Harbor Marina to septic tank leachfield systems.
- 2. Holiday Harbor Incorporated owns and operates Holiday Harbor Marina in accordance with a special use permit from the U.S. Department of Agriculture Forest Service, who administers the property (Assessors Parcel No. 085-240-013) for the public. Holiday Harbor Incorporated and U.S. Department of Agriculture Forest Service (Forest Service) are hereafter referred to as Discharger.
- 3. Holiday Harbor Incorporated submitted an Application/Report of Waste Discharge (ROWD), dated 11 October 2007, requesting revised WDRs for a new sewage treatment and disposal system at Holiday Harbor Marina.
- 4. Holiday Harbor Marina is located in Section 15, T34N, R4W, MDB&M (O'Brien USGS Quadrangle), as shown on Attachment A, which is incorporated herein and made part of this Order.
- 5. Existing on water facilities authorized under the Holiday Harbor Incorporated special use permit include; moorage for 400 boats, operation of 70 commercial houseboats, a marina service dock with four fuel dispensers, two houseboat sewage pump out stations, floating rest room facilities, general store, and minor boat repair shop. During receding lake levels, Holiday Harbor Marina relocates within Bailey Cove to the Wintoon Campground Cove area. Existing land based facilities include a 27 unit Recreational Vehicle (RV) park with full services, public sanitary facilities, and RV park manager's residence, one full-time residence, a restaurant/store, and maintenance building/storage yard. Domestic wastes generated from the full-time residences, restaurant/store, and RV park are discharged to three separate septic tank leachfield systems.
- 6. In 2000, a Regional Water Board staff survey of Shasta Lake marinas found that a variety of deodorizing chemicals are used in commercial houseboat sewage holding tanks with chemical constituents that may include but are not limited to: ammonium nitrate, calcium nitrate, n-alkyl dimethyl benzyl ammonium chloride, n-alkyl dimethyl benzyl ethyl ammounium chloride, formaldehyde, alkoxylated linear primary alcohol,

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gluteraldehyde, methanol, and ethoxylated nonylphenol. The amount of deodorizing chemicals used in sewage holding tanks of private houseboats, cabin cruisers, and small portable toilets is unknown. Holiday Harbor Incorporated exclusively uses 'Happy Camper' odorless holding tank treatment, which does not contain formaldehyde.

- 7. On 6 September 2001, the Regional Water Board adopted Resolution No. 05-01-211 authorizing the Executive Officer to enter into a memorandum of understanding (MOU) with the Forest Service, to eliminate gray water discharges from houseboats to Shasta Lake after 6 September 2006. In January 2004, the Executive Officer and Forest Service Supervisor signed MOU No. 04-MU-11051458-004.
- 8. Gray water is defined in MOU No. 04-MU-1151458-004 as water generated from showers, kitchen sinks, bathroom sinks, wet bars, dishwashers, and washing machines.
- 9. The Discharger operates 70 commercial houseboats. At this time none of the commercial houseboats are equipped with hot tubs. However, if hot tubs are installed in the future, the wastewater will be removed through the marina's sewage pump-out system.
- 10. In July 2007, Holiday Harbor Incorporated constructed an on-site sewage treatment system to accommodate the increased waste flow rates from the capture of gray water. The system includes one 10,000-gallon surge tank, one 10,000-gallon septic tank with a duplex pump, and 2,072 linear feet of leach lines on approximately one-half acre of land in the overflow parking area approximately 2 miles from the marina. Wastewater is trucked to the disposal site from the existing 2,500-gallon holding tank. The system is designed to treat and dispose of a maximum of 7,500 gallons per day. Wastewater generated above the maximum design flow will be hauled to the Redding Regional Septage Disposal Facility in Anderson.
- 11. Wastes may also be discharged to Shasta Lake as a result of marina operations such as the refueling of vessels, storage of fuel, storage of chemicals, and maintenance of the facilities (including cleaning, washing, and refurbishing of rental houseboats). During the cleaning process, the Discharger uses water and a dilute solution of cleaning agent. Wastewater from houseboat cleaning is directly discharged to Shasta Lake.
- 12. Petroleum products are stored in two 10,000-gallon underground storage tanks adjacent to the RV Park manager's residence. When the marina relocates, during low water conditions, petroleum products are dispensed from two 1,000-gallon portable aboveground storage tanks. The Discharger has notified Regional Water Board staff of plans to replace the underground fuel storage tanks and store fuel in an above ground tank placed on a floating barge to service the marina. Fuel piping and the marina dock system will also be upgraded.
- 13. Minor boat repair, cleaning, and washing of rental boats occur on the marina's floating service dock. Major boat repair (including engine overhaul, the removal of aquatic

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- growth, and loose paint from vessel hulls, and repainting) occurs within a designated boat yard and maintenance area. Most repairs occur during the winter and spring.
- 14. Storm water from the facility discharges to Shasta Lake and is regulated under the General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (WDID # 5R45I010771).

#### SITE DESCRIPTION

- 15. Holiday Harbor Marina lies within the Shasta Dam Hydrologic Unit (506), Shasta Lake Hydrologic Area (506.10) Calwater 2.1. The underlying soil in the disposal area consists of weathered metamorphic gravels in a sand and clay matrix to a depth of 18 feet below ground surface. In September 2004 percolation test results were between 10 and 42 minutes per inch, averaging 29 minutes per inch. The Discharger used a conservative percolation rate of 34 minutes per inch to design the new on-site sewage treatment and disposal system.
- 16. The average annual rainfall, reported at the U.S. Bureau of Reclamation Shasta Dam Station, is approximately 60 inches and the average annual evaporation rate is approximately 70 inches.

#### SURFACE AND GROUNDWATER CONDITIONS

- 17. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, (Basin Plan) designates beneficial uses, establishes water quality objectives and contains implementation plans and policies adopted by the State Water Resources Control Board. Pursuant to California Water Code Section 13263(a), waste discharge requirements must implement the Basin Plan.
- 18. Surface water drainage is to Shasta Lake, a tributary of the Sacramento River.
- 19. The Basin Plan designates the beneficial uses of Shasta Lake as municipal and domestic supply; agricultural supply; industrial supply; hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; spawning reproduction and/or early development; wildlife habitat; and navigation.
- 20. Groundwater elevations range from 1,037 feet MSL to 1,067 feet MSL in the vicinity of the Discharger's RV park. The depth to groundwater fluctuates with the elevation of Shasta Lake. The direction of groundwater flow is generally toward the southeast.
- 21. Drinking water for Holiday Harbor Marina is obtained from an on-site well regulated by Shasta County Department of Resource Management, Environmental Health Division.

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- 22. The Basin Plan designates the beneficial uses of underlying groundwater as municipal and domestic supply; agricultural supply; industrial service supply; and industrial process supply.
- 23. The Basin Plan establishes numerical and narrative water quality objectives for surface water and groundwater within the basin. Water quality objectives are the limits or levels of water quality constituents established for reasonable protection of beneficial uses of water or the prevention of nuisances.
- 24. The local economy is sustained substantially by recreational activities on Shasta Lake, therefore continued operation of the marina is important to the economic vitality of the region. Prior to implementation of MOU No. 04-MU-1151458-004, gray water was directly discharged to surface waters (Shasta Lake). Removing the direct discharge of waste to surface waters and discharging the waste to a disposal field will result in additional treatment, which otherwise would not have occurred, thus providing greater protection to waters of the state and benefiting the people of California.
- 25. State Water Resources Control Board Resolution No. 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters of the State (Antidegradation Policy), requires the Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonable affect beneficial uses, and will not result in water quality less than that described in the Regional Water Board policies. This Order requires effluent and groundwater monitoring to assure continued protection of beneficial uses of waters of the state.

#### GROUNDWATER MONITORING

26. Three monitoring wells (MW-1, MW-2, and MW-3) and two piezometers (P-1 and P-2) are constructed adjacent to the new on-site sewage treatment and disposal system for use in the groundwater detection monitoring system. Well MW-3 is hydraulically upgradient and wells MW-1 and MW-2 are hydraulically down-gradient of the treatment system, as shown on Attachment B. The piezometers are installed to identify whether groundwater mounding is occurring, and if so, whether the 5-foot separation between the bottom of the leachfield and the groundwater mound is being maintained. Although regional groundwater is approximately 250 feet bgs, groundwater monitoring wells were constructed in a shallow zone to the depth of the interface between less weathered and competent bedrock to detect the presence of saturated conditions. The interface is where saturated conditions from downward percolating water would most likely develop. According to monitoring well construction boring logs, groundwater was detected approximately 1,320 feet MSL. Groundwater well construction details are described in the table below:

Well ID	Туре	Top of Casing Elevation (MSL)	Depth (ft bgs)	Depth to Groundwater (ft bgs)	Screen Interval (ft bgs)
MW-3	Background	1,369	29	26.35	19-29
MW-1	Compliance	1,367	65.5	44.72	52.5-65.5
MW-2	Compliance	1,369	69	45.53	59-69
P-1	Piezometer	1,367	10	n/a	6.5-10
P-2	Piezometer	1,369	10	n/a	6.5-10

MSL = Mean Sea Level

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ft bgs = feet below ground surface

#### **CEQA AND OTHER CONSIDERATIONS**

- 27. Regional Water Board staff received a letter dated, 26 May 2006, stating that the Forest Service had completed the Environmental Assessment (EA) for the Gray Water Leach Systems Project and, the Forest Service Supervisor signed a Decision Notice/Finding of No Significant Impact for the project. The EA and Finding of No Significant Impact comply with Title 14, California Code of Regulations (CCR), Chapter 3, Section 15221.
- 28. The action to revise waste discharge requirements for ongoing operations at Holiday Harbor Marina is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.).
- 29. California Water Code Section 13267 states, in part, that:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the qualities of the waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

30. The Monitoring and Reporting Program required by this Order is necessary to assure compliance with these waste discharge requirements.

#### PROCEDURAL REQUIREMENTS

31. The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe revised waste discharge requirements for the discharges of

waste to land, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

- 32. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the revision of Waste Discharge Requirements.
- 33. Any person adversely affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review the action in accordance with Sections 2050 through 2068, Title 23 CCR. The petition must be received by the State Board Office of Chief Council, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date of adoption of this Order. Copies of the law and regulations applicable to the filing of a petition are available on the Internet at http://www.waterboards.ca.gov/water laws/ and will be provided upon request.

IT IS HEREBY ORDERED, pursuant to Sections 13263 and 13267 of the California Water Code, that Order No. 93-132 is rescinded, and that Holiday Harbor Incorporated and the U.S. Department of Agriculture Forest Service, their agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

## A. Discharge Prohibitions

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- 1. The discharge of 'hazardous waste' at this facility is prohibited. For the purpose of this Order, the terms, 'hazardous waste' and 'designated waste' are defined in Title 27, California Code of Regulations.
- 2. The discharge of waste from hot tub treatment or use to surface waters or surface water drainage courses is prohibited.
- 3. The by-pass or overflow of untreated or partially treated wastewater from the sewage disposal system is prohibited.
- 4. The discharge of gray water from houseboats to surface waters is prohibited.
- 5. The discharge of solid or liquid waste or pollutants to surface water, or surface water drainage courses is prohibited.

## B. Discharge Specifications

- 1. Neither the treatment nor the discharge of waste shall cause a nuisance or conditions of pollution as defined by the California Water Code, Section 13050.
- 2. The domestic wastewater discharged from the marina to the new sewage treatment and disposal system shall not exceed 7,500 gallons per day.

- 3. The discharge shall not cause degradation of any water supply.
- 4. The discharge shall remain within the designated disposal area at all times.
- 5. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 6. Objectionable odors originating at the facility shall be investigated, and controlled. Failing treatment system components shall be repaired.
- 7. Solid waste shall be properly contained to prevent waste or leachate from entering surface waters.
- 8. Deodorizing chemicals and chemicals used for houseboat and facility maintenance shall be stored in containers designed to prevent discharges to groundwater, surface water, or surface water drainage courses.

### C. GROUNDWATER LIMITATIONS

1. The discharge shall not cause contamination of underlying groundwater nor cause underlying groundwater to contain waste constituents that are significantly greater, statistically, than background water quality.

#### D. Provisions

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- 1. The Discharger shall comply with Monitoring and Reporting Program No. R5-2008-\_\_\_\_, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
- 2. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (Standard Provisions)," dated 1 March 1991, which are part of this Order.
- 3. The Discharger shall dispose of sludge and other solids removed from waste disposal systems in a manner that is consistent with Title 27, California Code of Regulations and approved by the Executive Officer.
- 4. The Discharger shall comply with the standards contained in Title 23, California Code of Regulations, Division 3, Chapter 20, Sections 2815 through 2829, Standards for the Removal of Sewage from Vessels.
- 5. The Discharger shall report to the Regional Water Board any material change or proposed change in character, location, or volume of the discharge or chemical or cleaning agents used at the Facility.

- 6. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Regional Water Board.
- 7. The Forest Service as administrator of the property at which the discharge occurs, is ultimately responsible for ensuring compliance with these requirements. Holiday Harbor Incorporated retains primary responsibility for compliance with these requirements, including day-to-day operations and monitoring. Enforcement actions will be taken against the Forest Service only in the event that enforcement actions against Holiday Harbor Incorporated are ineffective or would be futile.
- 8. A copy of this Order and its attachments shall be maintained at Holiday Harbor Incorporated, Holiday Harbor Marina, and the Shasta-Trinity National Recreation Area, Shasta Lake Ranger Station for reference by key operating personnel.
- 9. The Regional Water Board will review this Order periodically and revise requirements when necessary.

PAMELA C. CREEDON, Executive Officer, do her correct copy of an Order adopted by the California I	
Central Valley Region on	
	PAMELA C. CREEDON, Executive Officer

KB/KLC: sae 05/20/2008